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      (FILE 'HOME' ENTERED AT 14:24:44 ON 07 NOV 2003)

      FILE 'REGISTRY' ENTERED AT 14:24:56 ON 07 NOV 2003
L1                STRUCTURE UPLOADED
L2              6 S L1 SSS FULL

      FILE 'CAPLUS, USPATFULL' ENTERED AT 14:25:33 ON 07 NOV 2003
L3              3 FILE CAPLUS
L4              2 FILE USPATFULL
      TOTAL FOR ALL FILES
L5              5 S L2
L6                STRUCTURE UPLOADED

      FILE 'REGISTRY' ENTERED AT 14:28:59 ON 07 NOV 2003
L7              6 FILE CAPLUS

      FILE 'CAPLUS, USPATFULL' ENTERED AT 14:29:13 ON 07 NOV 2003
L8              3 FILE CAPLUS
L9              2 FILE USPATFULL
      TOTAL FOR ALL FILES
L10             5 S L7
L11             0 FILE CAPLUS
L12             0 FILE USPATFULL
      TOTAL FOR ALL FILES
L13             0 S L10 NOT L5
                SAVE ALL LSIRCARIGE/L

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FILE 'USPATFULL' ENTERED AT 14:29:13 ON 07 NOV 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l7
L8            3 FILE CAPLUS
L9            2 FILE USPATFULL

TOTAL FOR ALL FILES
L10           5 L7

=> s l10 not l5
L11           0 FILE CAPLUS
L12           0 FILE USPATFULL

TOTAL FOR ALL FILES
L13           0 L10 NOT L5

=> d his

     (FILE 'HOME' ENTERED AT 14:24:44 ON 07 NOV 2003)

     FILE 'REGISTRY' ENTERED AT 14:24:56 ON 07 NOV 2003
L1              STRUCTURE UPLOADED
L2             6 S L1 SSS FULL

     FILE 'CAPLUS, USPATFULL' ENTERED AT 14:25:33 ON 07 NOV 2003
L3             3 FILE CAPLUS
L4             2 FILE USPATFULL
     TOTAL FOR ALL FILES
L5             5 S L2
L6              STRUCTURE UPLOADED

     FILE 'REGISTRY' ENTERED AT 14:28:59 ON 07 NOV 2003
L7             6 FILE CAPLUS

     FILE 'CAPLUS, USPATFULL' ENTERED AT 14:29:13 ON 07 NOV 2003
L8             3 FILE CAPLUS
L9             2 FILE USPATFULL
     TOTAL FOR ALL FILES
L10            5 S L7
L11            0 FILE CAPLUS
L12            0 FILE USPATFULL
     TOTAL FOR ALL FILES
L13            0 S L10 NOT L5
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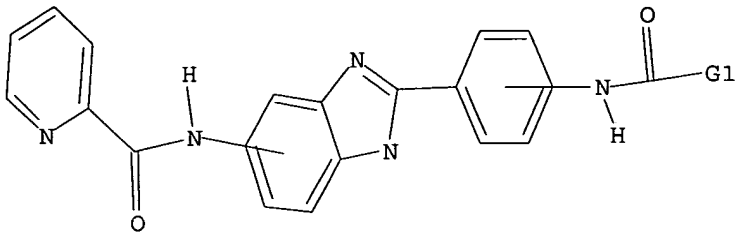

G1 H,Cb,Cy,Hy

Structure attributes must be viewed using STN Express query preparation.

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FULL SEARCH INITIATED 14:25:19
FULL SCREEN SEARCH COMPLETED - 269 TO ITERATE

100.0% PROCESSED 269 ITERATIONS 6 ANSWERS
SEARCH TIME: 00.00.01

L2 6 SEA SSS FUL L1

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L2 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2003 ACS on STN
RN 609853-71-6 REGISTRY
CN 2-Pyridinecarboxamide, N-[2-[4-[[[3-(acetyloxy)tricyclo[3.3.1.13,7]dec-1-yl]carbonyl]amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)
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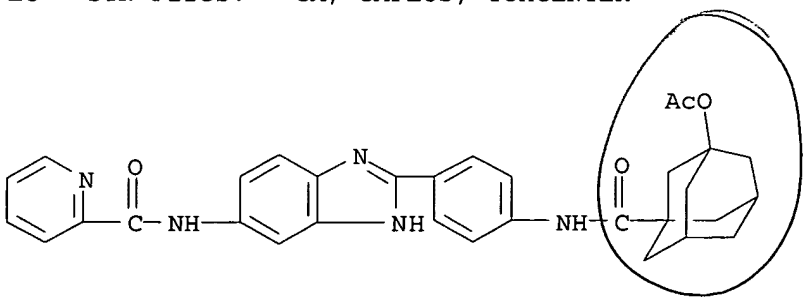
MF C32 H31 N5 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2003 ACS on STN
RN 609853-70-5 REGISTRY
CN 2-Pyridinecarboxamide, N-[2-[4-[[(3-hydroxytricyclo[3.3.1.13,7]dec-1-

yl)carbonyl]amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)
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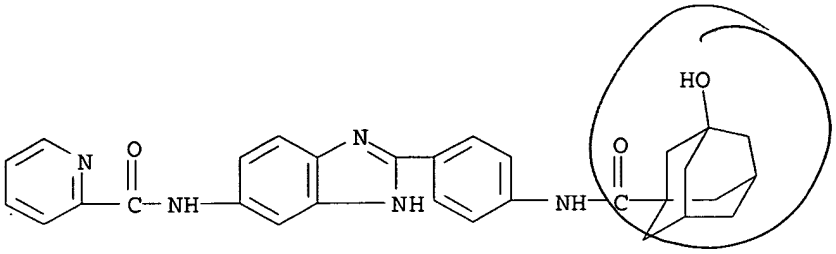
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2003 ACS on STN
RN 479074-73-2 REGISTRY
CN 2-Pyridinecarboxamide, N-[2-[4-[(cycloheptylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H27 N5 O2
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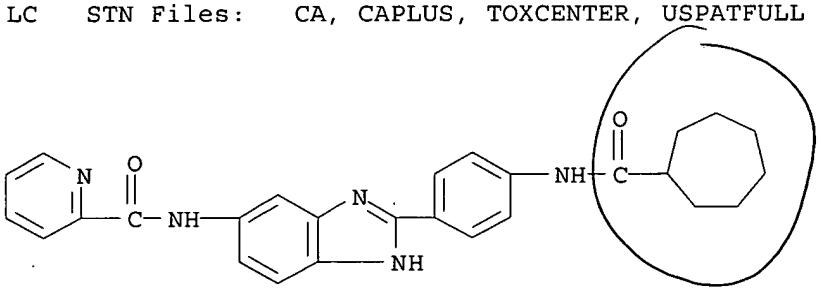
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2003 ACS on STN
RN 479074-72-1 REGISTRY
CN 2-Pyridinecarboxamide, N-[2-[4-[(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
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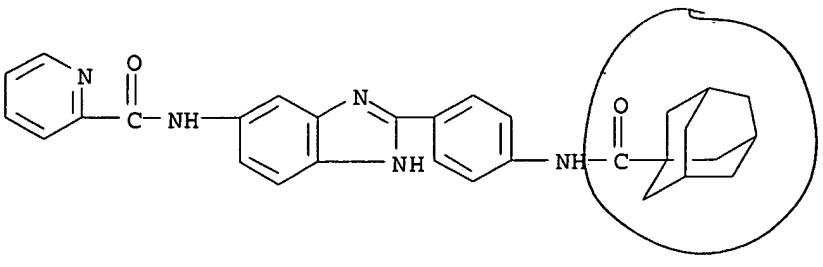
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2003 ACS on STN
RN 479074-71-0 REGISTRY
CN 2-Pyridinecarboxamide, N-[2-[4-[(cyclohexylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)
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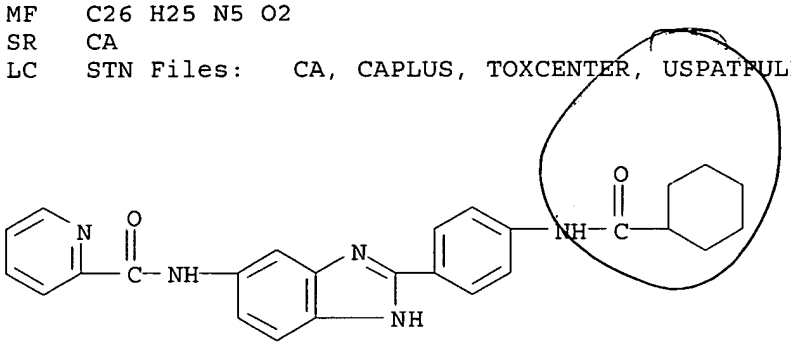
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2003 ACS on STN
RN 366011-96-3 REGISTRY
CN 2-Pyridinecarboxamide, N-[4-[5-[(2-pyridinylcarbonyl)amino]-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
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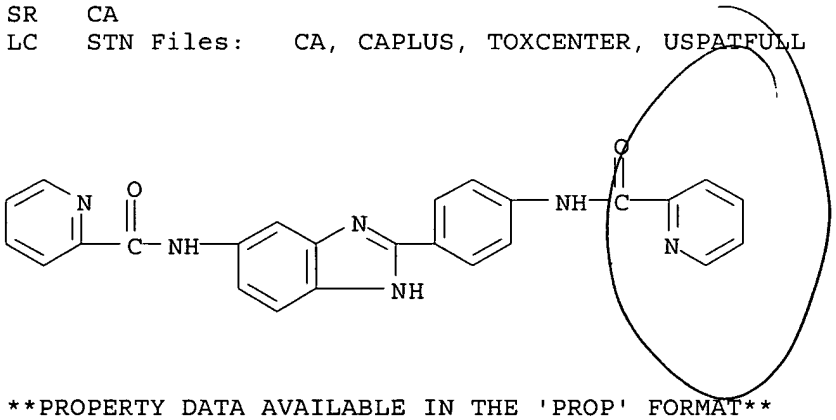

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil caplus, uspatful

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	158.23	158.44

FILE 'CAPLUS' ENTERED AT 14:25:33 ON 07 NOV 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 14:25:33 ON 07 NOV 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l2
L3 3 FILE CAPLUS
L4 2 FILE USPATFULL

TOTAL FOR ALL FILES
L5 5 L2

=> d 1-5 ibib

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:796412 CAPLUS
DOCUMENT NUMBER: 139:307758
TITLE: Use of benzimidazole analogs in the treatment of cell proliferation
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 280 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082186	A2	20031009	WO 2003-US6981	20030306

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-367686P P 20020325

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:5494 CAPLUS
DOCUMENT NUMBER: 138:55965
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 128 pp., Cont.-in-part of U.S. Ser. No. 422,397.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003004203	A1	20030102	US 2001-983054	20011016

US 6271390	B1	20010807	US 1999-316870	19990521
US 6303645	B1	20011016	US 1999-422397	19991021

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021

OTHER SOURCE(S): MARPAT 138:55965

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:757818 CAPLUS
DOCUMENT NUMBER: 135:303891
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: U.S., 157 pp., Cont.-in-part of U.S. 6,271,390.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6303645	B1	20011016	US 1999-422397	19991021
US 6271390	B1	20010807	US 1999-316870	19990521
US 2002010343	A1	20020124	US 2001-882340	20010614
US 6451829	B2	20020917		
US 2003004203	A1	20030102	US 2001-983054	20011016

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021

OTHER SOURCE(S): MARPAT 135:303891
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2003:4162 USPATFULL
TITLE: Benzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C., San Diego, CA, UNITED STATES
Richards, Mark L., San Diego, CA, UNITED STATES
Campbell, Michael G., Durham, NC, UNITED STATES
Major, Michael W., Mequon, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003004203	A1	20030102
APPLICATION INFO.:	US 2001-983054	A1	20011016 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-422397, filed on 21 Oct 1999, PATENTED Continuation-in-part of Ser. No. US 1999-316870, filed on 21 May 1999, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86494P	19980522 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 791
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2001:179137 USPATFULL
TITLE: Benzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C., San Diego, CA, United States
Richards, Mark L., La Jolla, CA, United States
Campbell, Michael G., Durham, NC, United States
Major, Michael W., Glendale, WI, United States
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6303645	B1	20011016
APPLICATION INFO.:	US 1999-422397		19991021 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-316870, filed on 21 May 1999, now patented, Pat. No. US 6271390

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86494P	19980521 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Jarvis, William R. A.
LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear, LLP
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 705
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 1-5 ibib, hitstr

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:796412 CAPLUS
DOCUMENT NUMBER: 139:307758
TITLE: Use of benzimidazole analogs in the treatment of cell proliferation
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 280 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082186	A2	20031009	WO 2003-US6981	20030306

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-367686P P 20020325
IT **366011-96-3 479074-71-0 479074-72-1**
479074-73-2 609853-70-5 609853-71-6
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(use of benzimidazole analogs in the treatment of cell proliferation)

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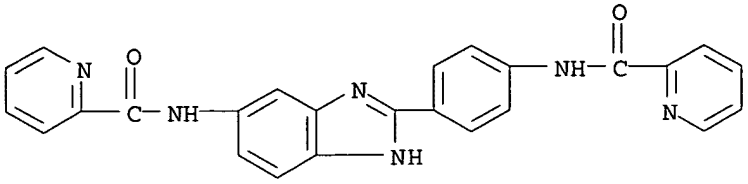
CN 2-Pyridinecarboxamide, N-[4-[5-[(2-pyridinylcarbonyl)amino]-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 479074-71-0 CAPLUS
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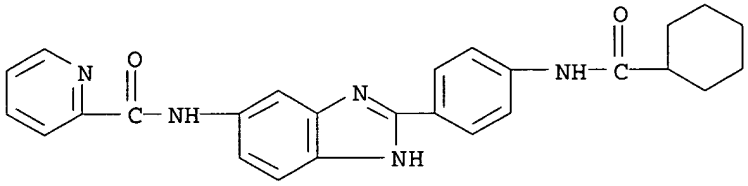
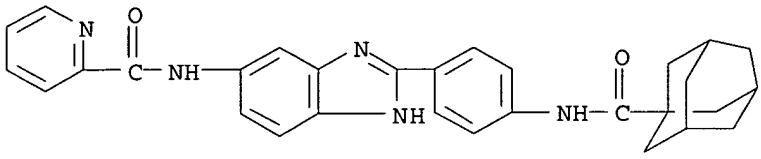


RN 479074-72-1 CAPLUS
CN 2-Pyridinecarboxamide, N-[2-[4-[(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



RN 479074-73-2 CAPLUS
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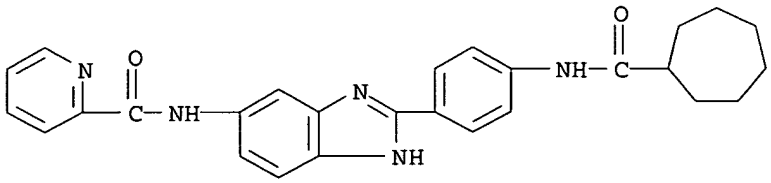

RN 609853-70-5 CAPLUS
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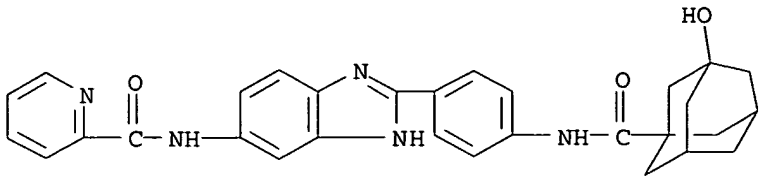
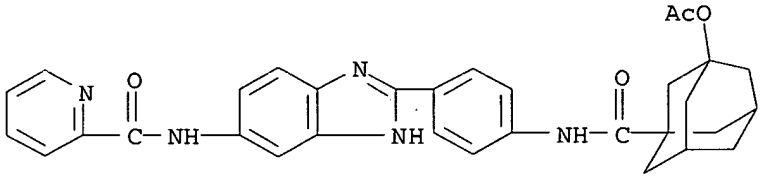


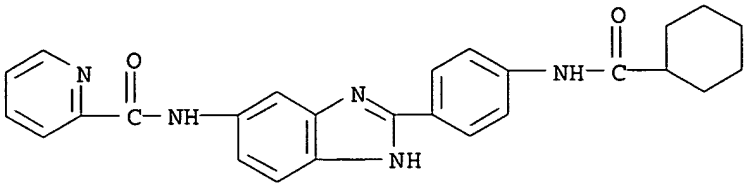
RN 609853-71-6 CAPLUS
CN 2-Pyridinecarboxamide, N-[2-[4-[[[3-(acetyloxy)tricyclo[3.3.1.13,7]dec-1-yl]carbonyl]amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



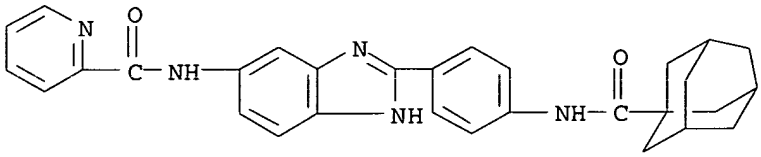
L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:5494 CAPLUS
DOCUMENT NUMBER: 138:55965
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 128 pp., Cont.-in-part of U.S. Ser. No. 422,397.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003004203	A1	20030102	US 2001-983054	20011016
US 6271390	B1	20010807	US 1999-316870	19990521
US 6303645	B1	20011016	US 1999-422397	19991021

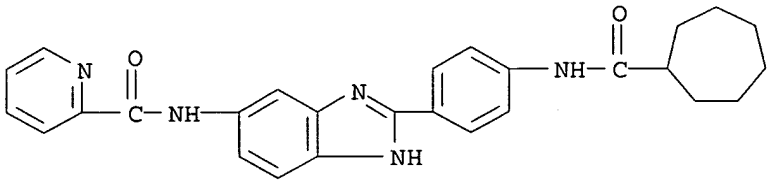
PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021
OTHER SOURCE(S): MARPAT 138:55965
IT **479074-71-0P 479074-72-1P 479074-73-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of diacylbenzimidazole derivs. as modulators of IgE)
RN 479074-71-0 CAPLUS
CN 2-Pyridinecarboxamide, N-[2-[4-[(cyclohexylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



RN 479074-72-1 CAPLUS
CN 2-Pyridinecarboxamide, N-[2-[4-[(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



RN 479074-73-2 CAPLUS
CN 2-Pyridinecarboxamide, N-[2-[4-[(cycloheptylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:757818 CAPLUS
DOCUMENT NUMBER: 135:303891
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: U.S., 157 pp., Cont.-in-part of U.S. 6,271,390. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

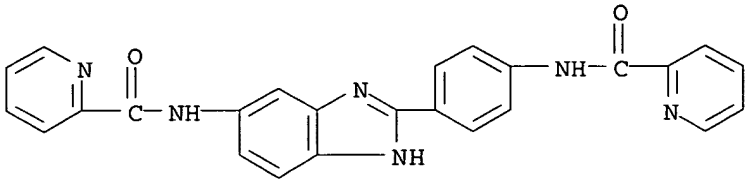
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6303645	B1	20011016	US 1999-422397	19991021
US 6271390	B1	20010807	US 1999-316870	19990521
US 2002010343	A1	20020124	US 2001-882340	20010614
US 6451829	B2	20020917		
US 2003004203	A1	20030102	US 2001-983054	20011016

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021
OTHER SOURCE(S): MARPAT 135:303891
IT **366011-96-3P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of diacylbenzimidazole derivs. as modulators of IgE)

RN 366011-96-3 CAPLUS

CN 2-Pyridinecarboxamide, N-[4-[5-[(2-pyridinylcarbonyl)amino]-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2003:4162 USPATFULL

TITLE: Benzimidazole derivatives as modulators of IgE

INVENTOR(S): Sircar, Jagadish C., San Diego, CA, UNITED STATES
Richards, Mark L., San Diego, CA, UNITED STATES
Campbell, Michael G., Durham, NC, UNITED STATES
Major, Michael W., Mequon, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003004203	A1	20030102
APPLICATION INFO.:	US 2001-983054	A1	20011016 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-422397, filed on 21 Oct 1999, PATENTED Continuation-in-part of Ser. No. US 1999-316870, filed on 21 May 1999, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86494P	19980522 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660

NUMBER OF CLAIMS: 9

EXEMPLARY CLAIM: 1

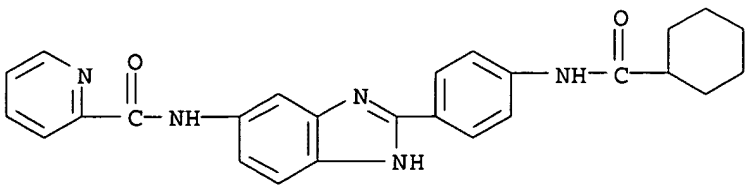
LINE COUNT: 791

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

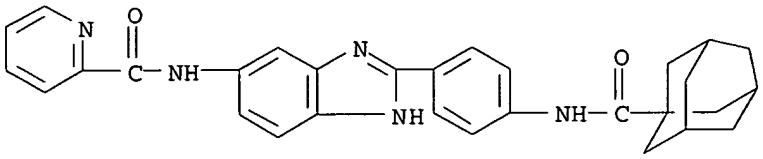
IT **479074-71-0P 479074-72-1P 479074-73-2P**
(synthesis of diacylbenzimidazole derivs. as modulators of IgE)

RN 479074-71-0 USPATFULL

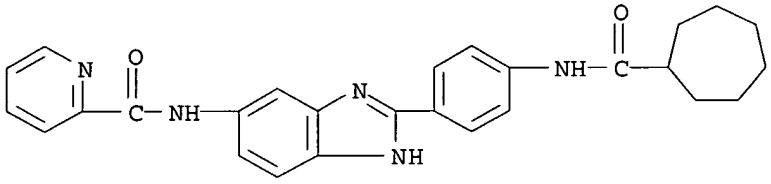
CN 2-Pyridinecarboxamide, N-[2-[4-[(cyclohexylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



RN 479074-72-1 USPATFULL
CN 2-Pyridinecarboxamide, N-[2-[4-[(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



RN 479074-73-2 USPATFULL
CN 2-Pyridinecarboxamide, N-[2-[4-[(cycloheptylcarbonyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)



L5 ANSWER 5 OF 5 USPATFULL on STN

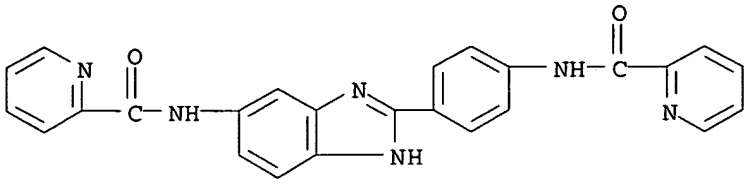
ACCESSION NUMBER:	2001:179137 USPATFULL
TITLE:	Benzimidazole derivatives as modulators of IgE
INVENTOR(S):	Sircar, Jagadish C., San Diego, CA, United States Richards, Mark L., La Jolla, CA, United States Campbell, Michael G., Durham, NC, United States Major, Michael W., Glendale, WI, United States
PATENT ASSIGNEE(S):	Avanir Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6303645	B1	20011016
APPLICATION INFO.:	US 1999-422397		19991021 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-316870, filed on 21 May 1999, now patented, Pat. No. US 6271390		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86494P	19980521 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Jarvis, William R. A.
LEGAL REPRESENTATIVE:	Knobbe, Martens, Olson & Bear, LLP
NUMBER OF CLAIMS:	11
EXEMPLARY CLAIM:	1
LINE COUNT:	705

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **366011-96-3P**
(drug; synthesis of diacylbenzimidazole derivs. as modulators of IgE)
RN 366011-96-3 USPATFULL
CN 2-Pyridinecarboxamide, N-[4-[5-[(2-pyridinylcarbonyl)amino]-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)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L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:796412 CAPLUS
DOCUMENT NUMBER: 139:307758
TITLE: Use of benzimidazole analogs in the treatment of cell proliferation
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 280 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082186	A2	20031009	WO 2003-US6981	20030306

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-367686P P 20020325

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:5494 CAPLUS
DOCUMENT NUMBER: 138:55965
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 128 pp., Cont.-in-part of U.S. Ser. No. 422,397.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003004203	A1	20030102	US 2001-983054	20011016
US 6271390	B1	20010807	US 1999-316870	19990521
US 6303645	B1	20011016	US 1999-422397	19991021

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021
OTHER SOURCE(S): MARPAT 138:55965

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:757818 CAPLUS
DOCUMENT NUMBER: 135:303891
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.

PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: U.S., 157 pp., Cont.-in-part of U.S. 6,271,390.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6303645	B1	20011016	US 1999-422397	19991021
US 6271390	B1	20010807	US 1999-316870	19990521
US 2002010343	A1	20020124	US 2001-882340	20010614
US 6451829	B2	20020917		
US 2003004203	A1	20030102	US 2001-983054	20011016

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021
OTHER SOURCE(S): MARPAT 135:303891
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2003:4162 USPATFULL
TITLE: Benzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C., San Diego, CA, UNITED STATES
Richards, Mark L., San Diego, CA, UNITED STATES
Campbell, Michael G., Durham, NC, UNITED STATES
Major, Michael W., Mequon, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003004203	A1	20030102
APPLICATION INFO.:	US 2001-983054	A1	20011016 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-422397, filed on 21 Oct 1999, PATENTED Continuation-in-part of Ser. No. US 1999-316870, filed on 21 May 1999, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86494P	19980522 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 791
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2001:179137 USPATFULL
TITLE: Benzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C., San Diego, CA, United States
Richards, Mark L., La Jolla, CA, United States
Campbell, Michael G., Durham, NC, United States
Major, Michael W., Glendale, WI, United States
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6303645	B1	20011016
APPLICATION INFO.:	US 1999-422397		19991021 (9)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-316870, filed on 21 May 1999, now patented, Pat. No. US 6271390	
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86494P	19980521 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Jarvis, William R. A.	
LEGAL REPRESENTATIVE:	Knobbe, Martens, Olson & Bear, LLP	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
LINE COUNT:	705	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:796470 CAPLUS
DOCUMENT NUMBER: 139:307690
TITLE: Preparation of isoquinoline and isochroman derivatives for treating virus infectious diseases
INVENTOR(S): Inoue, Takayuki; Maki, Katsuyuki; Hatakenaka, Kazuaki; Yamagishi, Yukiko
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082265	A2	20031009	WO 2003-JP3929	20030328

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2002-1481 A 20020402
AU 2002-2002953603A 20021230

L12 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:796412 CAPLUS
DOCUMENT NUMBER: 139:307758
TITLE: Use of benzimidazole analogs in the treatment of cell proliferation
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 280 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082186	A2	20031009	WO 2003-US6981	20030306

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-367686P P 20020325

L12 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:507700 CAPLUS
DOCUMENT NUMBER: 139:69945
TITLE: Rigid-rod, ion-conducting polyimide copolymers
INVENTOR(S): Litt, Morton H.; Savinell, Robert F.; Wainright, Jesse S.; Zhang, Yue
PATENT ASSIGNEE(S): Case Western Reserve University, USA
SOURCE: U.S., 28 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6586561	B1	20030701	US 2000-507086	20000218

PRIORITY APPLN. INFO.: US 1999-120482P P 19990218
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:5494 CAPLUS
DOCUMENT NUMBER: 138:55965
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 128 pp., Cont.-in-part of U.S. Ser. No. 422,397.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003004203	A1	20030102	US 2001-983054	20011016
US 6271390	B1	20010807	US 1999-316870	19990521
US 6303645	B1	20011016	US 1999-422397	19991021

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021
OTHER SOURCE(S): MARPAT 138:55965

L12 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:827772 CAPLUS
DOCUMENT NUMBER: 137:304798
TITLE: Screening of Schwann cell activators
INVENTOR(S): Konishi, Osamu; Inoue, Makoto; Kishino, Akiyoshi; Nakayama, Chikao; Kumagaya, Kazuo
PATENT ASSIGNEE(S): Sumitomo Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002318231	A2	20021031	JP 2001-121861	20010420

PRIORITY APPLN. INFO.: JP 2001-121861 20010420
OTHER SOURCE(S): MARPAT 137:304798

L12 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:416320 CAPLUS
DOCUMENT NUMBER: 138:130666
TITLE: Novel benzimidazole derivatives selectively inhibit endothelial cell growth and suppress angiogenesis in vitro and in vivo
AUTHOR(S): Hori, Akira; Imaeda, Yasuhiro; Kubo, Keiji; Kusaka, Masami
CORPORATE SOURCE: Pharmaceutical Discovery Research Division, Takeda Chemical Industries, Ltd., Jusohonmachi, Osaka, 532-8686, Japan
SOURCE: Cancer Letters (Shannon, Ireland) (2002), 183(1), 53-60
CODEN: CALEDQ; ISSN: 0304-3835
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:300234 CAPLUS
DOCUMENT NUMBER: 137:362545
TITLE: Small molecule modulators of HIV Rev/Rev response element interaction identified by random screening
AUTHOR(S): Chapman, Richard L.; Stanley, Thomas B.; Hazen, Richard; Garvey, Edward P.
CORPORATE SOURCE: Department of Molecular Screening, GlaxoSmithKline, Research Triangle Park, NC, 27709-3398, USA
SOURCE: Antiviral Research (2002), 54(3), 149-162
CODEN: ARSRDR; ISSN: 0166-3542
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:271984 CAPLUS
DOCUMENT NUMBER: 136:294828
TITLE: Preparation of benzimidazole analogs as down-regulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: U.S., 43 pp., Cont. of U.S. Ser. No. 316,870.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6369091	B1	20020409	US 1999-422304	19991021
US 6271390	B1	20010807	US 1999-316870	19990521
US 2002010343	A1	20020124	US 2001-882340	20010614
US 6451829	B2	20020917		
US 2003100582	A1	20030529	US 2002-103258	20020320

PRIORITY APPLN. INFO.: US 1998-86494P P 19980521
US 1999-316870 A2 19990521

US 1999-422304 A2 19991021
OTHER SOURCE(S): MARPAT 136:294828
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:757818 CAPLUS
DOCUMENT NUMBER: 135:303891
TITLE: Synthesis of diacylbenzimidazole derivatives as modulators of IgE
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: U.S., 157 pp., Cont.-in-part of U.S. 6,271,390.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6303645	B1	20011016	US 1999-422397	19991021
US 6271390	B1	20010807	US 1999-316870	19990521
US 2002010343	A1	20020124	US 2001-882340	20010614
US 6451829	B2	20020917		
US 2003004203	A1	20030102	US 2001-983054	20011016

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
US 1999-316870 A2 19990521
US 1999-422397 A2 19991021
OTHER SOURCE(S): MARPAT 135:303891
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:356164 CAPLUS
DOCUMENT NUMBER: 133:805
TITLE: Benzimidazole derivatives as neovascularization inhibitors and pharmaceutical compositions containing them
INVENTOR(S): Kubo, Keiji; Hori, Akira; Kusaka, Masami
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 77 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000143635	A2	20000526	JP 1999-158035	19990604

PRIORITY APPLN. INFO.: JP 1998-162489 A 19980610
JP 1998-246689 A 19980901
OTHER SOURCE(S): MARPAT 133:805

L12 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:214835 CAPLUS
DOCUMENT NUMBER: 132:265201
TITLE: Preparation of imidazole derivatives as gonadotropin-releasing hormone antagonists
INVENTOR(S): Suzuki, Nobuhiro; Takekawa, Shiro; Kubo, Keiji; Imaeda, Yasuhiro
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 79 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000095767	A2	20000404	JP 1998-273013	19980928

PRIORITY APPLN. INFO.: JP 1998-273013 19980928
OTHER SOURCE(S): MARPAT 132:265201

L12 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:763869 CAPLUS
DOCUMENT NUMBER: 132:12307
TITLE: Preparation of 2-[(aroylamino)phenyl]benzimidazoles as IgE inhibitors
INVENTOR(S): Sircar, Jagadish; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961020	A1	19991202	WO 1999-US11490	19990521
W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG				
CA 2332985	AA	19991202	CA 1999-2332985	19990521
AU 9943120	A1	19991213	AU 1999-43120	19990521
AU 754943	B2	20021128		
EP 1079830	A1	20010307	EP 1999-953286	19990521
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9910642	A	20011009	BR 1999-10642	19990521
JP 2002516277	T2	20020604	JP 2000-550480	19990521
NZ 508413	A	20030829	NZ 1999-508413	19990521
ZA 2000007754	A	20010816	ZA 2000-7754	20000221
NO 2000005889	A	20010122	NO 2000-5889	20001121
ZA 2000007753	A	20010718	ZA 2000-7753	20001221
ZA 2000007752	A	20011205	ZA 2000-7752	20001221

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
WO 1999-US11490 W 19990521
OTHER SOURCE(S): MARPAT 132:12307
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:763868 CAPLUS
DOCUMENT NUMBER: 132:12306
TITLE: Preparation of 2-[(aroylamino)phenyl]-5-(aroylamino)benzimidazoles and analogs as IgE inhibitors

INVENTOR(S): Sircar, Jagadish; Richards, Mark L.; Campbell, Michael G.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961019	A1	19991202	WO 1999-US11322	19990521
W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG				
CA 2332989	AA	19991202	CA 1999-2332989	19990521
AU 9940942	A1	19991213	AU 1999-40942	19990521
AU 754562	B2	20021121		
EP 1077700	A1	20010228	EP 1999-924442	19990521
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9910641	A	20011002	BR 1999-10641	19990521
JP 2002516276	T2	20020604	JP 2000-550479	19990521
ZA 2000007754	A	20010816	ZA 2000-7754	20000221
NO 2000005888	A	20010122	NO 2000-5888	20001121
ZA 2000007753	A	20010718	ZA 2000-7753	20001221
ZA 2000007752	A	20011205	ZA 2000-7752	20001221

PRIORITY APPLN. INFO.: US 1998-86494P P 19980522
WO 1999-US11322 W 19990521

OTHER SOURCE(S): MARPAT 132:12306
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:406145 CAPLUS
DOCUMENT NUMBER: 123:84178
TITLE: New rigid-chain copoly(naphthoyleneimidobenzimidazoles) and their films
AUTHOR(S): Ponomarev, I. I.; Nikol'skii, O. G.; Volkova, Yu. A.; Zakharov, A. V.
CORPORATE SOURCE: Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Moscow, 117813, Russia
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A i Seriya B (1994), 36(9), 1429-37
CODEN: VSSBEE
PUBLISHER: MAIK Nauka
DOCUMENT TYPE: Journal
LANGUAGE: Russian

L12 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:197007 CAPLUS
DOCUMENT NUMBER: 106:197007
TITLE: Effect of different unit structure related to asymmetry of one of the monomers of poly(amidobenzimidazole) properties
AUTHOR(S): Gel'mont, M. M.; Braverman, L. P.; Smirnova, V. N.; Kulichikhin, V. G.; Efros, L. S.
CORPORATE SOURCE: Leningr. Nauchno-Issled. Inst. Khim. Volokon Komp.

Mater., Leningrad, USSR
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A (1987), 29(3), 537-43
CODEN: VYSAAF; ISSN: 0507-5475
DOCUMENT TYPE: Journal
LANGUAGE: Russian

L12 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:129047 CAPLUS
DOCUMENT NUMBER: 106:129047
TITLE: Mass spectrometric study of dissociative ionization of low-molecular models of aromatic polyamides
AUTHOR(S): Pozdnyakov, O. F.; Yudin, V. S.
CORPORATE SOURCE: Fiz.-Tekh. Inst. im. Ioffe, Leningrad, USSR
SOURCE: Khimiya Vysokikh Energii (1987), 21(1), 38-44
CODEN: KHVKAO; ISSN: 0023-1193
DOCUMENT TYPE: Journal
LANGUAGE: Russian

L12 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:33811 CAPLUS
DOCUMENT NUMBER: 106:33811
TITLE: Hydrodynamic and optical properties of polyamides containing benzimidazole rings symmetrically incorporated into the chain
AUTHOR(S): Lavrenko, P. N.; Shtennikova, I. N.; Garmonova, T. I.; Mikryukova, O. I.; Gel'mont, M. M.; Efros, L. S.
CORPORATE SOURCE: Inst. Vysokomol. Soedin., Leningrad, USSR
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A (1986), 28(10), 2102-7
CODEN: VYSAAF; ISSN: 0507-5475
DOCUMENT TYPE: Journal
LANGUAGE: Russian

L12 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:407805 CAPLUS
DOCUMENT NUMBER: 105:7805
TITLE: Study of thermodynamics of the precipitation of a polyheteroarylene using low-molecular-weight models
AUTHOR(S): Karchmarchik, O. S.; Slavina, Z. N.; Gal, A. E.; Direnko, L. Yu.
CORPORATE SOURCE: USSR
SOURCE: Khimicheskie Volokna (1986), (2), 18-21
CODEN: KVLKA4; ISSN: 0023-1118
DOCUMENT TYPE: Journal
LANGUAGE: Russian

L12 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:560977 CAPLUS
DOCUMENT NUMBER: 103:160977
TITLE: Mass-spectrometry study of thermal degradation of fiber-forming aromatic polyamides
AUTHOR(S): Gal, A. E.; Perepelkin, K. E.; Pozdnyakov, O. F.; Yudin, V. S.; Gel'mont, M. M.
CORPORATE SOURCE: USSR
SOURCE: Khimicheskie Volokna (1985), (4), 14-17
CODEN: KVLKA4; ISSN: 0023-1118
DOCUMENT TYPE: Journal
LANGUAGE: Russian

L12 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1983:540428 CAPLUS
DOCUMENT NUMBER: 99:140428
TITLE: Synthesis of symmetric terephthaloyl derivatives of

	2-(p-aminophenyl)-5-aminobenzimidazoles as monomers for polyamides
AUTHOR(S):	Gel'mont, M. M.; Akulin, Yu. I.; Strelets, B. Kh.; Efros, L. S.
CORPORATE SOURCE:	Lening. Eksp. Zavod, Vses. Nauchno-Issled. Proektn. Inst. Iskusstven. Volokna, Leningrad, 195030, USSR
SOURCE:	Khimiya Geterotsiklicheskikh Soedinenii (1983), (7), 975-81 CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE:	Journal
LANGUAGE:	Russian
OTHER SOURCE(S):	CASREACT 99:140428

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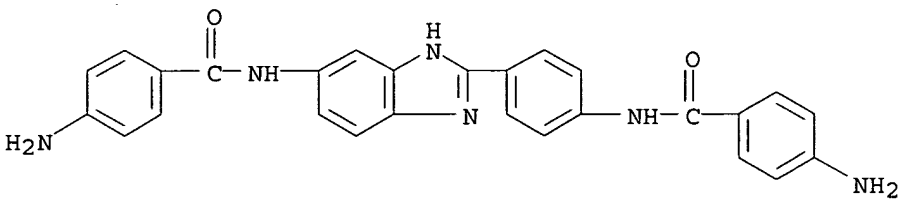
L12 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
IT **165677-25-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
RN 165677-25-8 CAPLUS
CN Benzamide, 4-amino-N-[4-[5-[(4-aminobenzoyl)amino]-1H-benzimidazol-2-yl]phenyl]-, polymer with 2-(4-aminophenyl)-1H-benzimidazol-5-amine and [2]benzopyrano[6,5,4-def][2]benzopyran-1,3,6,8-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 165677-24-7
CMF C27 H22 N6 O2



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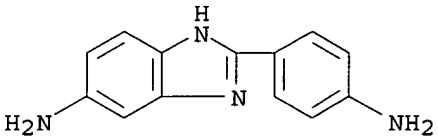
CMF C13 H12 N4



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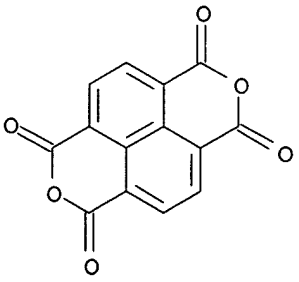
CRN 81-30-1
CMF C14 H4 O6

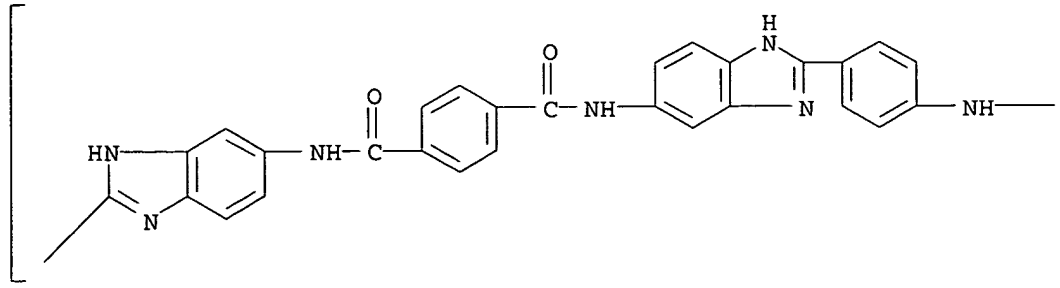


AN 1995:406145 CAPLUS
DN 123:84178
TI New rigid-chain copoly(naphthoyleneimidobenzimidazoles) and their films
AU Ponomarev, I. I.; Nikol'skii, O. G.; Volkova, Yu. A.; Zakharov, A. V.

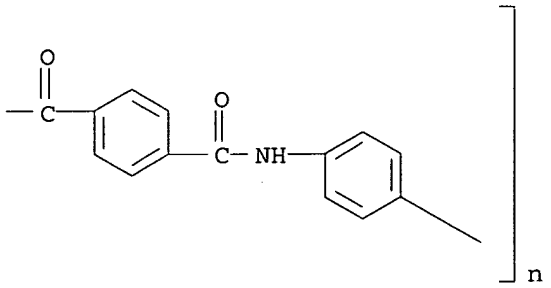
CS Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Moscow, 117813, Russia
SO Vysokomolekulyarnye Soedineniya, Seriya A i Seriya B (1994), 36(9), 1429-37
CODEN: VSSBEE
PB MAIK Nauka
DT Journal
LA Russian
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37
AB New copoly(naphthoyleneimidobenzimidazoles) were synthesized on the basis of 1,4,5,8-naphthalenetetracarboxylic dianhydride, 5(6)-amino-2-(p-aminophenyl)benzimidazole, and arom. rigid-rod diamines. The strength parameters of films based on these polymers increase sharply both in the initial and in an oriented state if the material contains 20-40 mol% rodlike fragments. The ultimate tensile strength of an oriented film material based on a polymer contg. 30 mol% di-Ph units reaches 1.5 GPa with the elasticity modulus of 38 GPa.
ST rigid rod polyamide polyimide polybenzimidazole; tensile polyamide polyimide polybenzimidazole film
IT Chains, chemical
(Kuhn's segment length; prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
IT Polyimides, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyamide-polybenzimidazole-, prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
IT Polybenzimidazoles
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyamide-polyimide-, prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
IT Polyimides, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polybenzimidazole-, prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
IT Polyamides, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polybenzimidazole-polyimide-, prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
IT Polybenzimidazoles
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyimide-, prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)
IT **165677-25-8P** 165677-26-9P 165677-27-0P 165677-28-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and tensile characteristics of copoly(naphthoyleneimidobenzimidazole) films)

L12 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
IT **87366-51-6**
RL: PRP (Properties)
(microstructure of, properties in relation to)
RN 87366-51-6 CAPLUS
CN Poly(1H-benzimidazole-2,5-diyliminocarbonyl-1,4-phenylenecarbonylimino-1H-benzimidazole-5,2-diyl-1,4-phenyleneiminocarbonyl-1,4-phenylenecarbonylimino-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



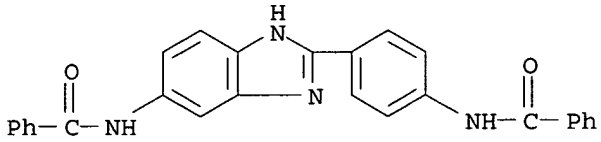
PAGE 1-B



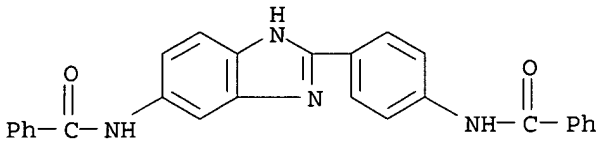
AN 1987:197007 CAPLUS
DN 106:197007
TI Effect of different unit structure related to asymmetry of one of the monomers of poly(amidobenzimidazole) properties
AU Gel'mont, M. M.; Braverman, L. P.; Smirnova, V. N.; Kulichikhin, V. G.; Efros, L. S.
CS Leningr. Nauchno-Issled. Inst. Khim. Volokon Komp. Mater., Leningrad, USSR
SO Vysokomolekulyarnye Soedineniya, Seriya A (1987), 29(3), 537-43
CODEN: VYSAAF; ISSN: 0507-5475
DT Journal
LA Russian
CC 36-2 (Physical Properties of Synthetic High Polymers)
AB A comparative evaluation of the Kuhn segment length, activation energy of viscous flow of 4% solns. in AcNMe2, H bonding, and phase transitions from isotropic to liq.-cryst. state in H2SO4 solns. revealed no significant differences between 2-(p-aminophenyl)-6-aminobenzimidazole-terephthaloyl chloride copolymers [89871-72-7] of asym. microstructure (i.e., contg. heat-to-tail mixts.) and N,N'-bis[p-(6-aminobenzimidazol-2-yl)phenyl]terephthalamide-terephthaloyl chloride copolymer [87366-16-3] of sym. microstructure.
ST polybenzimidazole polyamide microstructure property
IT Polyamides, properties
RL: PRP (Properties)
(benzimidazole-contg., microstructure of, properties in relation to)
IT Hydrogen bond
(formation of, in benzimidazole group-contg. polyamides, microstructure effect on)
IT Chains, chemical
(microstructure of, of benzimidazole group-contg. polyamides, properties in relation to)
IT Liquid crystals
(of benzimidazole group-contg. polyamides, formation of, microstructure effect on)
IT Flow
(viscous, of benzimidazole group-contg. polyamides, activation energy

of, microstructure effect on)
IT 1333-74-0P
RL: PREP (Preparation)
(hydrogen bond, formation of, in benzimidazole group-contg. polyamides, microstructure effect on)
IT 87366-16-3 **87366-51-6** 89871-72-7
RL: PRP (Properties)
(microstructure of, properties in relation to)

L12 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
IT **98806-53-2**, Bis-5,4'-dibenzanilide-2-phenylbenzimidazole
RL: USES (Uses)
(dissocd. ionization of, under electron-impact, radiation stability of arom. polyamides in relation to)
RN 98806-53-2 CAPLUS
CN Benzamide, N-[4-[5-(benzoylamino)-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



IT **107254-03-5P**
RL: PREP (Preparation)
(formation and fragmentation of, in electron-impact dissocd. ionization, radiation stability of arom. polyamides in relation to)
RN 107254-03-5 CAPLUS
CN Benzamide, N-[4-[5-(benzoylamino)-1H-benzimidazol-2-yl]phenyl]-, radical ion(1+) (9CI) (CA INDEX NAME)



AN 1987:129047 CAPLUS
DN 106:129047
TI Mass spectrometric study of dissociative ionization of low-molecular models of aromatic polyamides
AU Pozdnyakov, O. F.; Yudin, V. S.
CS Fiz.-Tekh. Inst. im. Ioffe, Leningrad, USSR
SO Khimiya Vysokikh Energii (1987), 21(1), 38-44
CODEN: KHVKAO; ISSN: 0023-1193
DT Journal
LA Russian
CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
AB Electron-impact dissociative ionization was studied of the low mol. wt. arom. compds. which could serve as the structural models of the chain polyamides. All the studied compds. were characterized by rather high values of radiation stability w (w = ratio of the no. of nondissociated mol. ions to the total no. of ions). The compds. which did not contain amide groups had higher w; the highest stability was obsd. for benzimidazole derivs. Introduction of an amide group led to destabilization of the mol. and w decrease. The compds. contg. amide groups bonded with a benzene ring had lower stability compare to the analogous compds. which did not have this bond like benzamide (w 25%) vs.

formylanilide (w 49%). The presence of the electron acceptor groups in the mol. decreased, while electron donor groups increased the radiation stability. Also, an effect of the mol. structure on the arom. polyamide stability is discussed; mechanisms are proposed of the radiation-induced degrdn. of the different polyamides, based on the anal. of the fragmentation pattern of the ions of the studied model compds.

ST polyamide radiolysis monomer dissociative ionization; amine amides electron impact decompn

IT Ionization in gases
(dissocd., electron-impact, of arom. low-mol. model compds. of arom. polyamides)

IT Polyamides, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(radiation stability of, dissocd. ionization of low mol. models in relation to)

IT Radiolysis
(electron, of low mol. wt. models of arom. polyamides)

IT 51-17-2, Benzimidazole 55-21-0 62-53-3, Aniline, properties 93-98-1, Benzanilide 100-52-7, Benzaldehyde, properties 103-70-8 716-79-0, 2-Phenylbenzimidazole 2963-77-1 7154-31-6 7621-86-5 13755-08-3 17223-18-6 17625-83-1, p-Aminobenzanilide 19250-69-2, 5-Benzanilide-2-phenylbenzimidazole 71002-88-5 98806-50-9 **98806-53-2**, Bis-5,4'-dibenzanilide-2-phenylbenzimidazole 98806-54-3
RL: USES (Uses)
(dissocd. ionization of, under electron-impact, radiation stability of arom. polyamides in relation to)

IT 17333-73-2P 19270-10-1P 107254-04-6P 107254-05-7P
RL: PREP (Preparation)
(formation and fragmentation of, in electron-impact dissocd. ionization of arom. model compds., radiation stability of arom. polyamides in relation to)

IT 107253-97-4P 107253-98-5P 107253-99-6P 107254-00-2P 107254-01-3P 107254-02-4P **107254-03-5P**
RL: PREP (Preparation)
(formation and fragmentation of, in electron-impact dissocd. ionization, radiation stability of arom. polyamides in relation to)

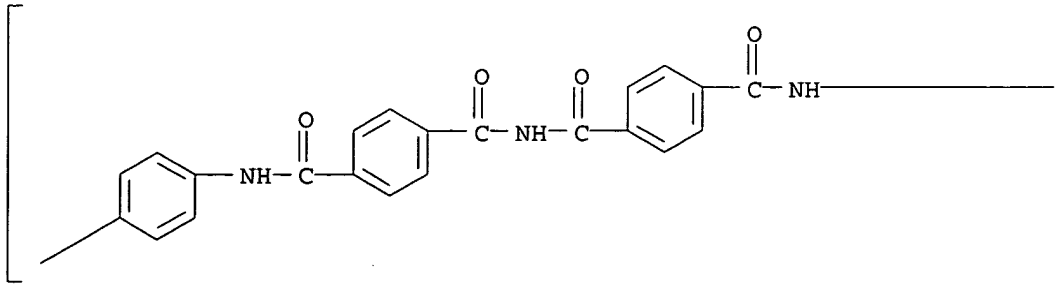
L12 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

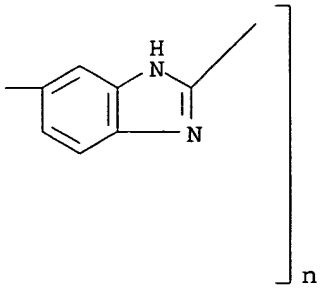
IT **106070-64-8**
RL: PRP (Properties)
(hydrodynamic and optical properties of solns. of, chain configuration effect on)

RN 106070-64-8 CAPLUS

CN Poly(1H-benzimidazole-2,5-diyliminocarbonyl-1,4-phenylenecarbonyliminocarbonyl-1,4-phenylenecarbonylimino-1,4-phenylene) (9CI) (CA INDEX NAME)

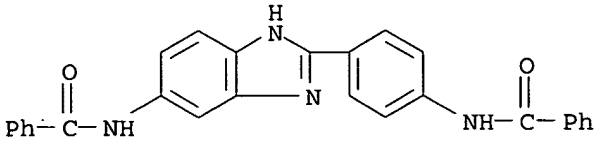
PAGE 1-A



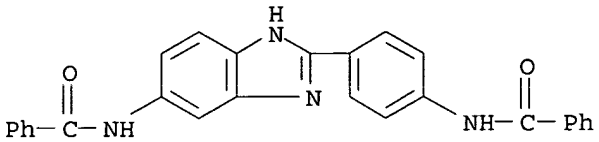


AN 1987:33811 CAPLUS
DN 106:33811
TI Hydrodynamic and optical properties of polyamides containing benzimidazole rings symmetrically incorporated into the chain
AU Lavrenko, P. N.; Shtennikova, I. N.; Garmonova, T. I.; Mikryukova, O. I.; Gel'mont, M. M.; Efros, L. S.
CS Inst. Vysokomol. Soedin., Leningrad, USSR
SO Vysokomolekulyarnye Soedineniya, Seriya A (1986), 28(10), 2102-7
CODEN: VYSAAF; ISSN: 0507-5475
DT Journal
LA Russian
CC 36-7 (Physical Properties of Synthetic High Polymers)
AB Translational diffusion, intrinsic viscosity, and birefringence of polyamide-polybenzimidazoles with different chain sequence distributions were studied in flowing H2SO4 solns. An increase in the fraction of the benzimidazole units of head-to-head configuration from 2/3 to 1 had no significant effect on equil. stiffness and on optical anisotropy of the chains in soln.
ST polyamide polybenzimidazole configuration soln property; diffusion polyamide polybenzimidazole configuration; viscosity polyamide polybenzimidazole configuration; flow birefringence polyamide polybenzimidazole configuration
IT Chains, chemical
(configuration of, of polyamide-polybenzimidazoles, hydrodynamic and optical properties of solns. in relation to)
IT Birefringence, flow
Diffusion
(of polyamide-polybenzimidazoles, in solns., chain configuration effect on)
IT Polyamides, properties
RL: PRP (Properties)
(benzimidazole group-contg., hydrodynamic and optical properties of solns. of, chain configuration effect on)
IT 87345-65-1
RL: PRP (Properties)
(hydrodynamic and optical properties of solns. of, as model for polyamide-polybenzimidazoles)
IT **106070-64-8**
RL: PRP (Properties)
(hydrodynamic and optical properties of solns. of, chain configuration effect on)

L12 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
IT **98806-53-2 102856-31-5**
RL: USES (Uses)
(pptn. of, mechanism and thermodn. of, poly(benzimidazoleterephthalamide) fiber formation in relation to)
RN 98806-53-2 CAPLUS
CN Benzamide, N-[4-[5-(benzoylamino)-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 102856-31-5 CAPLUS
CN Benzamide, N-[4-[5-(benzoylamino)-1H-benzimidazol-2-yl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

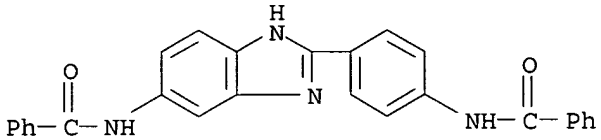


● HCl

AN 1986:407805 CAPLUS
DN 105:7805
TI Study of thermodynamics of the precipitation of a polyheteroarylene using low-molecular-weight models
AU Karchmarchik, O. S.; Slavina, Z. N.; Gal, A. E.; Direnko, L. Yu.
CS USSR
SO Khimicheskie Volokna (1986), (2), 18-21
CODEN: KVLKA4; ISSN: 0023-1118
DT Journal
LA Russian
CC 40-2 (Textiles)
AB Pptn. thermodn. of low-mol.-wt. models of a poly(benzimidazoleterephthalamide) and the structure of the ppts. were studied as functions of temp., pH, solvent-precipitant ratio, and electrolyte (LiCl) concn. to elucidate the mechanism of fiber formation. The pptn. proceeds via decompn. of model-LiCl (and/or solvent) assocs., induced by the precipitant. This results in the formation of precipitant-LiCl and -solvent assocs. and complete desolvation of the models. The results, esp. spectral data on ppts., indicate that the benzamide groups of the polymer are responsible for the pptn. during fiber formation.
ST pptn polybenzimidazoleterephthalamide fiber model; thermodn pptn polybenzimidazoleterephthalamide model; polyamide fiber pptn model
IT Heat of solution
(of poly(benzimidazoleterephthalamide) models, fiber formation in relation to)
IT Precipitation
(of poly(benzimidazoleterephthalamide) models, mechanism and thermodn. of, fiber formation in relation to)
IT Entropy
Free energy
(of soln., of poly(benzimidazoleterephthalamide) models, fiber formation in relation to)
IT Polyamide fibers, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(arom., benzimidazole group-contg., prepn. of, pptn. in, model study of)
IT 51-17-2DP, derivs., polymers
RL: SPN (Synthetic preparation); PREP (Preparation)
(fiber, prepn. of, pptn. in, model study of)

IT 7447-41-8, uses and miscellaneous
RL: USES (Uses)
(pptn. of poly(benzimidazoleterephthalamide) in presence of, fiber formation in relation to, model study of)
IT 93-98-1 716-79-0 34535-90-5 **98806-53-2 102856-31-5**
RL: USES (Uses)
(pptn. of, mechanism and thermodn. of, poly(benzimidazoleterephthalamide) fiber formation in relation to)

L12 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
IT **98806-53-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymer degrdn. of, as model for arom. polyamides, mass-spectroscopic study of)
RN 98806-53-2 CAPLUS
CN Benzamide, N-[4-[5-(benzoylamino)-1H-benzimidazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



AN 1985:560977 CAPLUS
DN 103:160977
TI Mass-spectrometry study of thermal degradation of fiber-forming aromatic polyamides
AU Gal, A. E.; Perepelkin, K. E.; Pozdnyakov, O. F.; Yudin, V. S.; Gel'mont, M. M.
CS USSR
SO Khimicheskie Volokna (1985), (4), 14-17
CODEN: KVLKA4; ISSN: 0023-1118
DT Journal
LA Russian
CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 40
AB The mechanism of thermal degrdn. of arom. polyamides, suitable for fiber manuf., was elucidated by analyzing the mass spectra of the model compds. and degrdn. products. The degrdn. of model compds. began with the breaking of HN-CO bonds, followed by that of arom. C-CO bonds, while with increasing length of model mols. the breaking of both bond types became a parallel process. The degrdn. of polymers proceeded via a no. of heterolytic and homolytic reactions, resulting in the formation of new structures which were stable at >700.degree.. The homolytic reactions involved in degrdn. were discussed in detail, and activation energies of degrdn. were detd. for 4 polyamides.
ST thermal degrdn arom polyamide mechanism; mass spectrometry arom polyamide degrdn; kinetics thermal degrdn arom polyamide
IT Polyamide fibers, reactions
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(aramid, thermal degrdn. of, model study of)
IT Polyamides, reactions
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(arom., thermal degrdn. of, kinetics and mechanism of)
IT Kinetics of polymer degradation
(thermal, of arom. polyamides)
IT Polymer degradation
(thermal, of arom. polyamides, mechanism of)
IT 51-17-2 55-21-0 62-53-3, reactions 93-98-1 100-52-7, reactions 103-70-8 716-79-0 2963-77-1 7154-31-6 7621-86-5 13755-08-3 17223-18-6 17625-83-1 19250-69-2 71002-88-5 98806-50-9

98806-52-1 **98806-53-2** 98806-54-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymer degrdn. of, as model for arom. polyamides, mass-spectroscopic study of)

IT 51-17-2D, derivs., polymers 24938-60-1 24938-64-5 24991-08-0 25035-33-0 25035-37-4
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(thermal degrdn. of, kinetics and mechanism of)

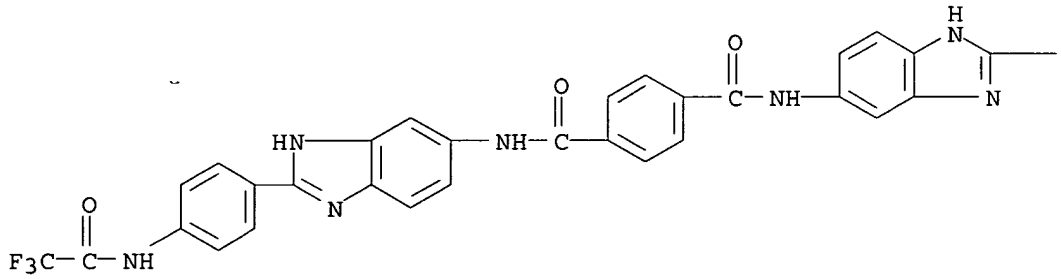
L12 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

IT **87353-68-2P 87366-51-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

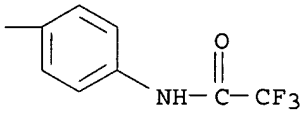
RN 87353-68-2 CAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis[2-[4-[(trifluoroacetyl)amino]phenyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



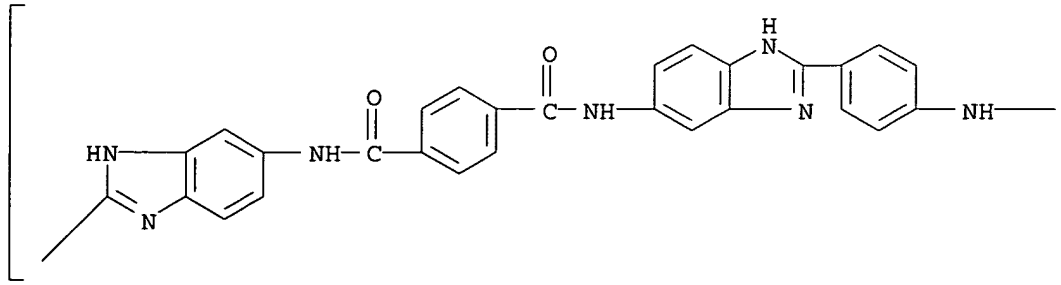
PAGE 1-B

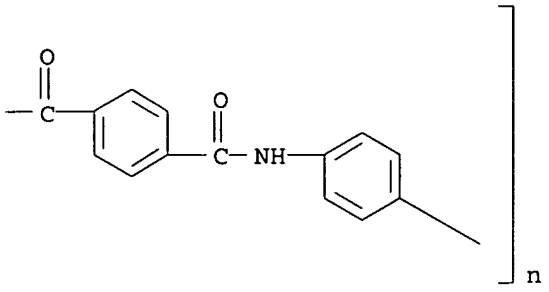


RN 87366-51-6 CAPLUS

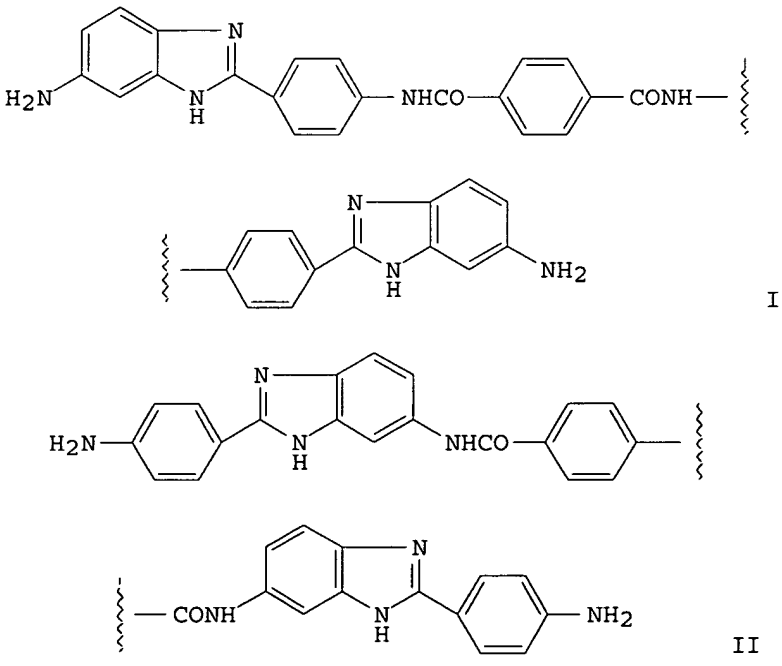
CN Poly(1H-benzimidazole-2,5-diyliminocarbonyl-1,4-phenylenecarbonylimino-1H-benzimidazole-5,2-diyl-1,4-phenyleneiminocarbonyl-1,4-phenylenecarbonylimino-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A





AN 1983:540428 CAPLUS
DN 99:140428
TI Synthesis of symmetric terephthaloyl derivatives of 2-(p-aminophenyl)-5-aminobenzimidazoles as monomers for polyamides
AU Gel'mont, M. M.; Akulin, Yu. I.; Strelets, B. Kh.; Efros, L. S.
CS Lening. Eksp. Zavod, Vses. Nauchno-Issled. Proektn. Inst. Iskusstven. Volokna, Leningrad, 195030, USSR
SO Khimiya Geterotsiklicheskikh Soedinenii (1983), (7), 975-81
CODEN: KGSSAQ; ISSN: 0453-8234
DT Journal
LA Russian
CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 28
OS CASREACT 99:140428
GI



I

II

AB Different synthetic routes to the diamines I [87345-64-0] and (II) [87345-65-1] were studied.. The most convenient consisted of acylation of 2-(p-aminophenyl)-5-nitrobenzimidazole [71002-88-5] or 5-amino-2-(p-nitrophenyl)benzimidazole [40655-18-3] with terephthaloyl chloride (III) [100-20-9] and redn. of the NO2 groups. The synthesis of

the nitro compds. and alternate routes to I and II are described. Polymn. of I or II with III gave linear polyamides with d.p. .apprx.50.

ST benzimidazole deriv polyamide; terephthaloyl chloride polyamide; nitrophenylbenzimidazole redn; aminophenylbenzimidazole deriv polyamide

IT Polyamides, uses and miscellaneous
RL: SPN (Synthetic preparation); PREP (Preparation)
(benzimidazole group-contg., prepn. of)

IT 2963-77-1 27030-98-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(nitration of)

IT 7621-86-5P 28689-19-2P 69571-00-2P 87345-54-8P 87345-58-2P
87345-61-7P 87345-62-8P 87345-63-9P 87345-64-0P 87345-65-1P
87353-68-2P 87366-15-2P 87366-16-3P **87366-51-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 99-56-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aminobenzoic acid)

IT 122-04-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with benzenetriamine)

IT 615-71-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with bis(carboxyphenyl)terephthalamide)

IT 97-02-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with bis[(chloroformylphenyl]terephthalamide)

IT 87345-57-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dinitroaniline)

IT 66248-00-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitrobenzoyl chloride)

IT 150-13-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitrophenylenediamine)

IT 40655-18-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with terephthaloyl chloride)

IT 71002-88-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with terephthaloyl chloride and trifluoroacetic anhydride)

IT 70142-79-9 87345-56-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with triaminobenzene)

IT 100-20-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of, with (aminophenyl)nitrobenzimidazole and derivs.)

IT 87345-59-3
RL: USES (Uses)
(redn. and terephthaloylation of)

IT 1772-39-0 87345-55-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(redn. of)

IT 87345-60-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(thermal cyclization of)